

L Number	Hits	Search Text	DB	Time stamp
1	1818	sebum	EPO; JPO; DERWENT	2004/02/07 12:59
2	2053	glucosamine	EPO; JPO; DERWENT	2004/02/07 12:59
3	4	sebum and glucosamine	EPO; JPO; DERWENT	2004/02/07 13:01
4	1	"6613897"	USPAT; US-PGPUB	2004/02/07 13:04
5	11055	hyaluron\$6	USPAT; US-PGPUB	2004/02/07 13:04
6	146074	depolymeriz\$4 hydrolysis hydroлиз\$4	USPAT; US-PGPUB	2004/02/07 13:05
7	359	hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)	USPAT; US-PGPUB	2004/02/07 13:05
8	301171	molecular adj weight	USPAT; US-PGPUB	2004/02/07 13:05
9	9097	mol adj wt	USPAT; US-PGPUB	2004/02/07 13:05
10	78157	mw	USPAT; US-PGPUB	2004/02/07 13:05
11	287	(hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((molecular adj weight) (mol adj wt) mw)	USPAT; US-PGPUB	2004/02/07 13:06
12	287	hyaluron\$6 and (depolymeriz\$4 hydrolysis hydroлиз\$4) and (hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((molecular adj weight) (mol adj wt) mw))	USPAT; US-PGPUB	2004/02/07 13:06
13	727475	@ad>=20000927	USPAT; US-PGPUB	2004/02/07 13:06
14	189	(hyaluron\$6 and (depolymeriz\$4 hydrolysis hydroлиз\$4) and (hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((molecular adj weight) (mol adj wt) mw))) not @ad>=20000927	USPAT; US-PGPUB	2004/02/07 13:07
15	9158	hyaluronan hyaluronic hyaluronate	USPAT; US-PGPUB	2004/02/07 13:08
16	321	(depolymeriz\$4 hydrolysis hydroлиз\$4) same (hyaluronan hyaluronic hyaluronate)	USPAT; US-PGPUB	2004/02/07 13:08
17	176	((hyaluron\$6 and (depolymeriz\$4 hydrolysis hydroлиз\$4) and (hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((molecular adj weight) (mol adj wt) mw))) not @ad>=20000927) and ((depolymeriz\$4 hydrolysis hydroлиз\$4) same (hyaluronan hyaluronic hyaluronate))	USPAT; US-PGPUB	2004/02/07 13:10
18	118551	low\$4 near4 ((molecular adj weight) (mol adj wt) mw)	USPAT; US-PGPUB	2004/02/07 13:11
19	100	((hyaluron\$6 and (depolymeriz\$4 hydrolysis hydroлиз\$4) and (hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((hyaluron\$6 same (depolymeriz\$4 hydrolysis hydroлиз\$4)) and ((molecular adj weight) (mol adj wt) mw))) not @ad>=20000927) and ((depolymeriz\$4 hydrolysis hydroлиз\$4) same (hyaluronan hyaluronic hyaluronate))) and (low\$4 near4 ((molecular adj weight) (mol adj wt) mw))	USPAT; US-PGPUB	2004/02/07 13:11

10/089,179

FILE 'CAPLUS' ENTERED AT 12:50:05 ON 07 FEB 2004

	E YATSUKA NOBUAKI/IN,AU
L1	13 S E3-4
	E SATO NOBUYUKI/IN,AU
L2	243 S E3-4
	E NISHIKAWA MASAZUMI/IN,AU
L3	48 S E3-4
	E TAMAI TADAKAZU/IN,AU
L4	97 S E2-4
	E MORIYAMA SHIGERU/IN,AU
L5	49 S E3-4
L6	404 S L1 OR L2 OR L3 OR L4 OR L5
L7	30127 S GLUCOSAMINE OR GLUCURONIC
L8	7 S L6 AND L7

L8 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:247186 CAPLUS  
 DOCUMENT NUMBER: 134:266518  
 TITLE: Preparation of oligosaccharide derivatives containing  
 glucuronic acid and glucosamine as  
 sebum production inhibitors  
 INVENTOR(S): Yatsuka, Nobuaki; Sato, Nobuyuki; Nishikawa,  
 Masazumi; Tamai, Tadakazu; Moriyama, Shigeru  
 PATENT ASSIGNEE(S): Maruha Corp., Japan  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001022971	A1	20010405	WO 2000-JP6638	20000927
W: AE, AL, AU, BA, BG, BR, CA, CN, CU, CZ, DZ, HR, HU, ID, IL, IN, IS, KR, LK, MA, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, US, VN, YU, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001097867	A2	20010410	JP 1999-272022	19990927
AU 2000074451	A5	20010430	AU 2000-74451	20000927
EP 1219296	A1	20020703	EP 2000-962862	20000927
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, MK, CY, AL				
PRIORITY APPLN. INFO.:			JP 1999-272022	A 19990927
			WO 2000-JP6638	W 20000927

OTHER SOURCE(S): MARPAT 134:266518

AB Sebum production inhibitors, which contain as the active ingredient compds. having glucuronic acid derivs. and glucosamine derivs. in the structure as represented by general formula [I; R1 = protecting group, OR10, NHR11, CH2R11, SR11 (wherein R10 = H, protecting group, Q, Q1, Q2; R11 = H, protecting group; provided that when R10 and R11 are H or protecting group, R1 and CO2R4 are in cis or trans-disposition or when R10 is Q-Q2, R12-R28 excluding R13, R17, and R26 are H or protecting group and R13, R17, and R26 are N3 or optionally protected NH2); R2-R8 = H, protecting group; R9 = H, protecting group, Q3, Q4 (wherein R31-R37 = H, protecting group); n = 0-25, provided that when n = 0, then R1 = OR10, R10 = Q2, and R9 = Q3 or Q4; the protecting group in I and Q1-Q4 is (un)substituted linear or branched C1-8 or C2-8 alkyl, (un)substituted C1-8 acyl, aromatic acyl, or aromatic alkyl; or any two of R2-R37 protecting groups excluding R13, R17, and R26 together form (un)substituted C3-8 alkylidene, benzylidene, or phthaloyl; when n<sub>2</sub>≥2, then R2-R8 are same or different for each repeating unit] or pharmacol. acceptable salts, are described. These compds. are useful for the prevention or treatment of diseases caused by excessive production of sebum such as acne, dandruff, and hair loss and also for cosmetics solving cosmetic problems caused by excessive production of sebum, e.g. aging odor. Thus, 30 g sodium hyaluronate was dissolved in 3 L distilled water, warmed to 40°, adjusted to pH 6.0 with 0.1 M NaOH, treated with hyaluronidase at 0.5 turbidity reduction unit/1 mg sodium hyaluronate, allowed to react at 40° for 100 h, subjected to ultrafiltration for removing the enzyme, and lyophilized to give a hydrolyzate (27.4 g) which was purified by anion-exchange chromatog. using a YMC-Pack IEC-AX column to give 1.7 g ΔHexAβ1→3GlcNAcβ1→4GlcAβ1→3GlcNA c.2Na [II; ΔHexA = 4-deoxy-α-L-threo-hex-4-enpyranuronosyl, i.e. Q4 (wherein R35 = R36 = H)], 5.9 g ΔHexAβ1→3GlcNAc. beta.1→4GlcAβ1→3GlcNAcβ1→4GlcAβ1.fwdar w.3GlcNAc.3Na (III), 3.4 g ΔHexAβ1→3GlcNAcβ1.fwdar w.4GlcAβ1→3GlcNAcβ1→4GlcAβ1→3GlcNAc.bet a.1→4GlcAβ1→3GlcNAc.4Na (IV), and 2.2 g ΔHexAβ1→3GlcNAcβ1→4GlcAβ1→3GlcNA cβ1→4GlcAβ1→3GlcNAcβ1→4GlcAβ1.fwd arw.3GlcNAcβ1→4GlcAβ1→3GlcNAc.5Na (V). II, III, IV, and V in vitro inhibited the production of sebum in auricular sebaceous gland-containing tissue from hamsters by 15.7, 28.6, 48.5, and 53.4%, resp. at 0.01%.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2000:468056 CAPLUS  
 DOCUMENT NUMBER: 133:99567

TITLE: Glucuronate and glucosamine derivatives-containing compounds as leukocyte-vascular endothelial cell adhesion inhibitors

INVENTOR(S): Yatsuka, Nobuaki; Sato, Nobuyuki; Moriyama, Shigeru; Tamai, Tadakazu; Nishikawa, Masazumi

PATENT ASSIGNEE(S): Maruha Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000191538	A2	20000711	JP 1998-372864	19981228
PRIORITY APPLN. INFO.:			JP 1998-372864	19981228

OTHER SOURCE(S): MARPAT 133:99567

AB Glucuronate and glucosamine derivs.-containing compds. (Markush's structures given) are claimed as leukocyte-vascular endothelial cell adhesion inhibitors for treatment of ischemia-reperfusion injury and inflammatory diseases. Formulation examples of tablets, capsules, suspensions, suppositories, and injections were given.

L8 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:723199 CAPLUS

DOCUMENT NUMBER: 131:309856

TITLE: Compounds having glucuronic acid derivatives and glucosamine derivatives in the structure, process for producing the same and utilization thereof

INVENTOR(S): Yatsuka, Nobuaki; Sato, Nobuyuki; Moriyama, Shigeru; Tamai, Tadakazu; Nishikawa, Masazumi

PATENT ASSIGNEE(S): Maruha Corporation, Japan

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9957301	A1	19991111	WO 1999-JP2306	19990430
W: AU, BR, CA, CN, KR, MX, NO, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 11310588	A2	19991109	JP 1998-120425	19980430
JP 2000103738	A2	20000411	JP 1998-273895	19980928
CA 2330388	AA	19991111	CA 1999-2330388	19990430
AU 9936274	A1	19991123	AU 1999-36274	19990430
AU 758575	B2	20030327		
EP 1074631	A2	20010207	EP 1999-918275	19990430
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
BR 9910574	A	20010911	BR 1999-10574	19990430
RU 2218922	C2	20031220	RU 2000-130301	19990430
NO 2000005402	A	20001218	NO 2000-5402	20001026
US 6613897	B1	20030902	US 2000-674252	20001030
PRIORITY APPLN. INFO.:			JP 1998-120425 A	19980430
			JP 1998-273895 A	19980928
			WO 1999-JP2306 W	19990430

AB Compds. (I) containing glucuronic acid derivs. and glucosamine derivs. are useful antiplatelet and antithrombotic agents. I are manufactured with enzyme of microorganism such as Streptomyces hyalurolyticus. Medical goods such as artificial organs and instruments are prepared from I.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:715056 CAPLUS

DOCUMENT NUMBER: 131:317781

TITLE: Glucuronate and glucosamine derivatives as new blood platelet adhesion inhibitors, the manufacturing method and its application

INVENTOR(S): Yatsuka, Nobuaki; Sato, Nobuyuki; Moriyama, Shigeru; Tamai, Tadakazu; Nishikawa, Masasumi

PATENT ASSIGNEE(S): Maruha Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11310588	A2	19991109	JP 1998-120425	19980430
CA 2330388	AA	19991111	CA 1999-2330388	19990430
WO 9957301	A1	19991111	WO 1999-JP2306	19990430
W: AU, BR, CA, CN, KR, MX, NO, RU, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9936274	A1	19991123	AU 1999-36274	19990430
AU 758575	B2	20030327		
EP 1074631	A2	20010207	EP 1999-918275	19990430
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
BR 9910574	A	20010911	BR 1999-10574	19990430
RU 2218922	C2	20031220	RU 2000-130301	19990430
NO 2000005402	A	20001218	NO 2000-5402	20001026
US 6613897	B1	20030902	US 2000-674252	20001030
PRIORITY APPLN. INFO.:			JP 1998-120425	A 19980430
			JP 1998-273895	A 19980928
			WO 1999-JP2306	W 19990430

OTHER SOURCE(S): MARPAT 131:317781

AB Glucuronate and glucosamine derivs. (Markush's structure given) and their pharmacol. acceptable salts are claimed as new blood platelet adhesion inhibitors and useful as antithrombotics for treatment of cardiovascular diseases and for coating of artificial organs, medical goods and prosthetics. Hyaluronidase from microorganism including *Streptomyces hyalurolyticus* is used for preparing the derivs. Formulation examples of the derivs. were given.

L8 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1997:145460 CAPLUS

DOCUMENT NUMBER: 126:222699

TITLE: Microbial system for polysaccharide depolymerization: enzymic route for gellan depolymerization by *Bacillus* sp. GL1

AUTHOR(S): Hashimoto, Wataru; Maesaka, Keiji; Sato, Nobuyuki; Kimura, Shoji; Yamamoto, Kenji; Kumagai, Hidehiko; Murata, Kousaku

CORPORATE SOURCE: Res. Inst. Food Sci., Kyoto Univ., Uji, 611, Japan

SOURCE: Archives of Biochemistry and Biophysics (1997), 339(1), 17-23

CODEN: ABBIA4; ISSN: 0003-9861

PUBLISHER: Academic

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A bacterium-producing polysaccharide lyase (gellan lyase) was isolated from soil samples and identified to be *Bacillus* sp. The lyase was purified from the culture fluid of the bacterium (designated *Bacillus* sp. GL1) grown in the presence of gellan as a C source. The purified gellan lyase depolyd. deacetylated gellan and gave a single oligosaccharide product with a mol. weight of 646, which was determined by fast atom bombardment mass spectrometry. The structure of the product was determined by the combination of mass spectrometry, HPLC anal., and high-resolution proton NMR spectroscopy to be a tetrasaccharide of glucuronyl-glucosyl-rhamnosyl-glucose, with unsatd. glucuronic acid at the nonreducing terminal. When incubated in cell exts. of *Bacillus* sp. GL1, the tetrasaccharide was 1st converted to the trisaccharide without the unsatd. glucuronyl residue, and the trisaccharide was when converted to hydrolyzed monosaccharides glucose and rhamnose. These results show that, in the bacterium *Bacillus* sp. GL1 gellan is 1st depolyd. to give a tetrasaccharide, repeating unit in gellan mol., by an extracellular gellan lyase and then tetrasaccharide is hydrolyzed to monosaccharides by successive actions of intracellular exoglycosidases.

L8 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:307969 CAPLUS

DOCUMENT NUMBER: 124:341019

TITLE: Production, purification and application of flatfish (*Paralichthys olivaceus*) interferon

AUTHOR(S): Tamai, Tadakazu; Oda, Hiroshi; Sato, Nobuyuki; Moriyama, Shigeru; Kimura, Shoji; Shirahata, Sanetaka; Murakami, Hiroki

CORPORATE SOURCE: MARUHA CORPORATION, Tsukuba, 300-42, Japan  
 SOURCE: Animal Cell Technology: Developments towards the 21st Century, [Proceedings of the Meeting], Veldhoven, Neth., Sept. 12-16, 1994 (1995), Meeting Date 1994, 449-453. Editor(s): Beuvery, E. Coen; Griffiths, J. Brian; Zeijlemaker, Wim P. Kluwer: Dordrecht, Neth. CODEN: 62VAAP

DOCUMENT TYPE: Conference

LANGUAGE: English

AB Recombinant Baby Hamster Kidney (BHK) cells, producing flatfish (Paralichthys olivaceus, flounder) interferon (IFN) were cultured in a radial flow packed-bed bioreactor. The cells could easily spread on the surface of macroporous micro beads, to achieve the cell d. of  $1.3 \times 10^8$  cells/mL-matrix in the packed bed bioreactor. The fish IFN productivity was increased and reached a value 5,000 times higher value than that with 175 cm<sup>2</sup> T-flask. The spent medium of the BHK cells was applied to aWGA agarose column chromatog. and the fish IFN was recovered by N-acetyl glucosamine elution. The min. effective amts. of IFN against Hirame (flatfish) Rhabdovirus (HRV) infection on flatfish was investigated. A small amount of the fish IFN as  $2 \times 100$  pg/g-fish body weight prevented HRV infection to flatfish by oral administration. And the drug was also effective to rescue rainbow trout from HRV challenge.

L8 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:250050 CAPLUS

DOCUMENT NUMBER: 118:250050

TITLE: Isolation and characterization of a sialic acid-specific binding lectin from the hemolymph of Asian horseshoe crab, Tachyplesus tridentatus

AUTHOR(S): Tsuboi, Isami; Matsukawa, Masahito; Sato, Nobuyuki; Kimura, Shoji

CORPORATE SOURCE: Taiyo Cent. Res. Inst., Taiyo Fish. Co., Ltd., Tsukuba, Ibaraki, Japan

SOURCE: Biochimica et Biophysica Acta (1993), 1156(3), 255-62  
 CODEN: BBACAQ; ISSN: 0006-3002

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A lectin was isolated from the hemolymph of the Asian horseshoe crab T. tridentatus by using glycophorin HA affinity chromatog. and Sephacryl S-300 gel filtration. The lectin mol. weight was approx. 533 kDa; it was a simple protein comprised of 2 nonidentical subunits with mol. wts. of 30 and 32 kDa. The hemagglutinating activity of the lectin against equine erythrocytes was strongly inhibited by several sialoglycoproteins and weakly inhibited by sialic acid, although not inhibited by neutral sugars, hexosamines, N-acetylhexosamines, glucuronic acid, or several asialoglycoproteins. In addition, glycophorin HA was more effective than glycophorin HA digested with trypsin in inhibiting hemagglutination by the lectin. These results suggest that the purified lectin specifically reacts with sialic acid-containing glycoprotein.